

Amendments to the Specification

At page 7, lines 26-32, please amend as follows:

The inventors herein identified the first gene, *GALAT1*, which encodes a pectin biosynthetic enzyme by employing a partial purification-tandem mass spectrometry approach combined with a search of the *Arabidopsis* gene/protein database. Two genes gene products, designated JS33 and JS36 herein, were identified as present only in the GalAT-containing fractions. As demonstrated hereinbelow, the expressed protein from the nucleic acid sequence of JS36 indeed exhibits the predicted GalAT enzymatic activity.

At page 15, lines 14-25, please amend as follows:

These two genes, along with another *Arabidopsis* gene with high sequence similarity to JS36 (designated JS36L for JS36-like) (see below) were either cloned by RT-PCR (JS36) using mRNA from *Arabidopsis* flower and stem tissue, or a cDNA clone was obtained from the *Arabidopsis* Biological Resource Center (JS33 and JS36L). The proteins encoded by these genes each have a predicted single transmembrane domain (Table III). The genes were truncated to remove their N-terminal region including all or most of the predicted transmembrane domain (see Table III), and the truncated genes were inserted into a mammalian expression vector pEAK10 (Edge BioSystems as modified by Kelley Moremen lab, CCRC) containing an N-terminal heterologous signal sequence (targeting the protein for secretion into the medium), a polyhistidine (HIS) tag, and two influenza hemagglutinin hemagglutinin (HA) epitopes (useful for immunoabsorption).